CALIFORNIA COASTAL COMMISSION

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Staff Report:	June 28, 2001
Hearing Date:	July 10-13, 2001
Commission Action:	

COMBINED STAFF REPORT: PERMIT AMENDMENTS

AMENDMENT
APPLICATION NOs.: 5-97-316-A4; A-5-LGB-97-166-A4; 5-83-959-A8 (an amendment to A-61-76)

APPLICANTS: County of Orange (5-97-316-A4; A-5-LGB-97-166-A4)
Aliso Water Management Agency (5-83-959-A8)

AGENT: Larry Paul, County of Orange, Planning and Development Services
Mike Wellborn, County of Orange, Planning and Development Services

PROJECT LOCATION: Aliso Creek, 300 feet upstream of the Coast Highway bridge, and 1.5 miles off-shore of Aliso Creek County Beach, City of Laguna Beach, County of Orange

DESCRIPTION OF PREVIOUSLY APPROVED PROJECT:

5-97-316 (as amended):The temporary installation of a sand berm in Aliso Creek to collect creek flows and divert them to an outfall line which discharges 1.5 miles offshore. The development was authorized for the period May 1, 1998 through October 15, 1998. The development also received temporary re-authorization for the period May 1, 1999 through October 15, 1999 and May 1, 2000 through October 15, 2000.

A-5-LGB-97-166 (as amended): Installation of: 1) a temporary sand berm on the banks of Aliso Creek, 2) motorized pump, and 3) a 200 foot long pipe between a point in Aliso Creek, upstream of the proposed berm, and an adjacent existing sewage outfall; to collect creek flows (up to 3.23. million gallons per day) and divert them to the existing outfall line which discharges approximately 1.5 miles offshore for one summer season. The proposed development was authorized only for the period May 1, 1998 through October 15, 1998. The proposed development also received re-authorization for the period of May 1, 1999 through October 15, 1999 and May 1, 2000 through October 15, 2000.

A-61-76/5-83-959 (as amended): Construction of a 48-inch pipeline and ocean outfall to discharge regional waste water effluent 1.5 miles offshore. Authorize use of the 48-inch pipeline and outfall for the temporary diversion of Aliso Creek during the period May 1, 1998 and October 15, 1998; May 1, 1999 through October 15, 1999; and May 1, 2000 through October 15, 2000.

DESCRIPTION OF AMENDMENTS:

5-97-316-A4; A-5-LGB-97-166-A4: Authorize the temporary installation of a sand berm in Aliso Creek to collect creek flows and divert them to an outfall line which discharges 1.5 miles offshore for the time period of May 1, 2001 through October 15, 2001.

5-83-959-A8: Authorize use of the pipeline and outfall for the diversion of Aliso Creek from May 1, 2001 through October 15, 2001.

STAFF NOTE: On June 14, 2001 a public hearing was held on the subject applications. At that hearing, testimony and materials were presented to the Commission by members of the public regarding alternatives to the proposed diversion of untreated creek water 1.5 miles offshore. Alternatives presented included diversion of creek water to sewage treatment plants in the area for treatment. Another alternative presented included the use of portable

water treatment systems (e.g. Clear Creek) to treat the contaminated water in the creek. The applicant was not available to respond to these suggestions from the public. Therefore, the Commission voted to postpone action in order to allow the applicant to analyze the alternatives suggested.

Commission staff have requested that the applicant analyze the treatment plant and portable treatment system alternatives. The applicant is in the process of preparing that analysis. However, as of the date of this staff report, the analysis has not been made available to Commission staff for review. The applicant expects to have the analysis available prior to the July 2001 hearing. Provided time allows, Commission staff will prepare an addendum responding to the analysis once the analysis is submitted by the applicant. In addition, Commission staff have encouraged the applicant to attend the hearing on this matter so that they would be available to respond to any questions or issues raised at the hearing.

SUMMARY OF STAFF RECOMMENDATION: The purpose of the proposed project is to re-locate contaminated water away from Aliso Beach in order to reduce beach contamination postings and beach closures during the summertime beach use season. Staff recommends **APPROVAL** of the proposed project with special conditions. The major issues raised by this project include verification that the project achieves its intended goal without adverse water quality and other resource impacts in the creek or at the outfall, water quality, streambed alteration, flood hazards, growth inducement/air quality, and public access. In addition, this third re-authorization of the diversion raises issues about continued reliance upon the diversion to address poor water quality at the beach as opposed to addressing water quality issues at the watershed level in order to improve water quality and eliminate the need for the diversion.

The proposed development was previously approved for implementation as a temporary project to occur during a specific period, May 1, 1998 through October 15, 1998. However, exceptionally large El Nino-induced summertime creek flows prevented implementation of the project in 1998, therefore the applicant was unable to analyze the effectiveness of the diversion at reducing water quality problems in the surf zone. Accordingly, the applicant proposed and the Commission approved the project for the period of May 1, 1999 through October 15, 1999 with special conditions. During 1999 the diversion was only operational for 15 days (October 1-15, 1999). However, results from that period were positive. Thus the applicant proposed and obtained Commission approval for the diversion for May 1, 2000 through October 15, 2000. Once again, a reduction in the quantity of beach closures and water quality postings during the diversion period indicates the diversion contributes to improvements in the quality of water at Aliso Beach. Therefore, the applicant is seeking approval for the diversion to occur again from May 1, 2001 through October 15, 2001.

The proposed project requires amendments to three permits: 1) Coastal Development Permit 5-97-316 which covers the portion of the project in the Commission's original jurisdiction; 2) Coastal Development Permit A-5-LGB-166 which covers the portion of the development in within the jurisdiction of the City of Laguna Beach (which was acted on by the Commission in 1998 as an appeal and De Novo approval and which the Commission retains jurisdiction over for purposes of condition compliance and amendment); and 3) Coastal Development Permit A-61-76 issued by the California Coastal Zone Conservation Commission (now known as 5-83-959) which relates to the sewage effluent outfall into

which the creek waters are being diverted and which must be amended to allow the County of Orange to use the outfall approved by CDP A-61-76 to discharge summertime flows from Aliso Creek. At the time of approval of permit A-61-76, diversion of Aliso Creek into the outfall was not contemplated, therefore, the amendment authorizes the use of the outfall for these purposes. All three coastal development permit amendment applications needed to authorize the project are scheduled concurrently (5-97-316-A4, A-5-LGB-97-166-A4 and 5-83-959-A8).

At the time of Commission action in 1998, the proposed project was the subject of some controversy. Opponents to the project were concerned with the potential for upstream flooding which might be associated with pump failure or unexpectedly large summertime discharges of the creek. In addition, opponents were concerned with impacts upon biological resources. Finally, opponents were concerned the proposed temporary project, which simply moves pollution further offshore, would become a permanent solution in place of a comprehensive plan which works toward overall reduction of contaminant levels in Aliso Creek. Supporters of the development expressed their belief that the proposed project would provide a feasible interim measure to reduce contamination levels at local beaches while a longer term solution (i.e. water quality management plan) was developed. All approvals granted by the Commission were conditioned to address adverse impacts related to flooding and biological resources. Opposition to the project subsided between 1998 and 2000.

However, some opposition to the creek diversion has re-emerged at this time. Opponents to the project are concerned about the slow progress on efforts to implement watershed-level measures which would address the source of the water quality problems and eliminate need for the berm. In addition, the designation of the lower reach of Aliso Creek (where the proposed berm is located) as critical habitat for the federally endangered Tidewater goby has raised concerns about the impacts the proposed project may have upon biological resources. It must be noted that no tidewater goby have been found in Aliso Creek in recent times. Rather, Aliso Creek was identified as critical habitat because of the potential for future goby translocation to the creek. Therefore, the proposed project would not have any direct impact upon the goby.

The applicant acknowledges that the creek diversion is intended as a temporary short term measure to address water quality problems within the Aliso Creek watershed which contribute to water quality degradation in the creek and in the surf zone where the creek discharges and which threatens the health and safety of users of popular Aliso Beach and users of the creek itself. The applicant in partnership with the various municipalities that are a part of the Aliso Creek Watershed are working on mid-term and long-term measures to address the source of the water quality problems. These mid-term and long-term measures include completion and implementation of the recommendations developed through the U.S. Army Corps of Engineers' *Aliso Creek Watershed Management Study* and improved compliance with existing municipal storm water discharge permits.

Meanwhile, other regulatory agencies are increasing enforcement efforts to improve water quality in the watershed. For instance, the California Regional Water Quality Control Board for the San Diego Region (RWQCB) has issued a Clean Up and Abatement Order for the sub-watershed within the Aliso Creek watershed known as J03P02 which has prompted a rapid clean-up response from the responsible municipalities. In addition, the Executive

Director of RWQCB issued a "13225 Directive" on March 2, 2001 requiring an extensive water quality testing program designed to identify 'hot spots' within the watershed. Once the 'hot spots' within the watershed are identified, the directive requires implementation of measures to clean up those areas. The improved regulatory enforcement and positive responses to these directives from the applicant and other municipalities suggests that progress is occurring upon mid and long term measures which would eventually eliminate the need for this diversion in the future. In the interim, an "end of pipe" response to the contamination problem appears to be the most immediate way to reduce beach postings and closures and improve protection of the health and safety of users of popular Aliso Beach. Therefore, staff recommends approval of the proposed project with revised special conditions.

The special conditions of these amendments: 1) limit the proposed project to one summer season and limit the quantity of water which may be diverted; 2) require restoration of the stream after the temporary development is removed; 3) require submittal of water quality, biological and flood hazard monitoring data and conclusions regarding the data; 4) require removal of the berm before October 15, 2001 in the event of significant storm event; 5) require avoidance of adverse impacts upon the public's ability to use parking spaces adjacent to the project site; and 6) require that the water diverted through the outfall conform with State water quality standards. These measures will minimize all significant adverse impacts.

PROCEDURAL NOTE

1. Coastal Development Permit Amendments

The Commission's regulations provide for referral of permit amendment requests to the Commission if:

1) The Executive Director determines that the proposed amendment is a material change,

2) Objection is made to the Executive Director's determination of immateriality, or

3) The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material. 14 Cal. Admin. Code 13166.

In this case, the proposed amendment would authorize diversion of Aliso Creek to occur during the summer season of 2001. In order to authorize this change to the project, the special conditions must be updated to move the authorized period of activity from May 1, 2000 through October 15, 2000 to May 1, 2001 to October 15, 2001. Pursuant to Title 14, Section 13166(a)(1) of the California Code of Regulations, the Executive Director has determined that the proposed development constitutes a material amendment, as it would affect conditions required for the purpose of protecting coastal resources. Therefore, pursuant to Section 13166(a)(3) of the Commission's regulations, the Executive Director is referring this application to the Commission for action.

2. Standard of Review

a. Coastal Development Permit Amendment 5-97-316-A4

The portion of the proposed berm in the creek bed and the discharge point 1.5 miles offshore is within the Commission's original permit jurisdiction under Coastal Act Section 30519(b) and must be evaluated for consistency with the Chapter 3 policies of the Coastal Act. The policies of the certified Laguna Beach LCP may be used for guidance.

b. Coastal Development Permit Amendment A-5-LGB-166-A4

Section 30604(b) of the Coastal Act provides that the standard of review is the certified LCP for the portions of the proposed project within the certified area. This includes all of the project except for the portion of the berm in the creek bed and the portion of the outfall located offshore.

c. Coastal Development Permit Amendment 5-83-959-A8

The portion of the subject pipeline which is on land is within the certified area of the City of Laguna Beach. For this portion, the standard of review pursuant to Section 30604(b) of the Coastal Act is consistency with the certified local coastal program. The portion of the subject outfall offshore is within the Commission's original permit jurisdiction area. For this portion, the standard of review pursuant to Section 30519(b) of the Coastal Act is consistency with the Chapter 3 policies of the Coastal Act.

LOCAL APPROVALS RECEIVED: City of Laguna Beach CDP97-19

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

I. STAFF RECOMMENDATION, MOTION AND RESOLUTIONS OF APPROVAL:

The staff recommends that the Commission APPROVE the permit amendment applications with special conditions:

MOTION #1

I move that the Commission approve the proposed amendment to Coastal Development Permit No. 5-97-316 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE A PERMIT AMENDMENT:

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

MOTION #2

I move that the Commission approve the proposed amendment to Coastal Development Permit No. A-5-LGB-97-166 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE A PERMIT AMENDMENT:

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of the certified Local Coastal Program and the public access and recreation policies of the Coastal Act. Approval of the permit amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

MOTION #3:

I move that the Commission approve the proposed amendment to Coastal Development Permit No. 5-83-959 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE A PERMIT AMENDMENT:

The Commission hereby **APPROVES** the amendment to coastal development permit 5-83-959 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and with the certified Local Coastal Program. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS (APPLICABLE TO ALL PERMITS).

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

Special Conditions for Coastal Development Permit Amendment 5-97-316-A4:

1. **Removal of Development**. The diversion of up to a twenty-four (24) hour average flow rate of five (5) cubic feet per second (i.e., 3.23 million gallons per day) of the water flow of Aliso Creek approved by this permit is authorized only for the 2001 summer season from May 1 through October 15, 2001. In no case shall the diverted flows exceed seven (7) cubic feet per second (i.e., 4.52 million gallons per day) at any time. This permit does not authorize the diversion to continue past October 15, 2001. All structural development shall be removed as quickly as possible prior to the rainy season but in no case shall any development remain after October 25, 2001.

2. **Restoration**. The bed and banks of Aliso Creek disturbed by the approved project shall, after the removal of the berm and pipe, be restored, at a minimum, to the condition in which they existed prior to construction of the berm and installation of the pipe. As part of the restoration, the applicant shall remove all non-native invasive plant species from the project area. In addition, as part of the restoration the applicant shall re-vegetate for erosion control purposes the upland areas adjacent to the creek which were disturbed by construction activity. The applicant shall document and submit evidence of restoration of the creek bed and banks to the Executive Director by March 15, 2002. Documentation shall include the biological survey of the project area required in Special Condition 3 of this Coastal Development Permit Amendment and pre-construction and post-restoration topographic surveys of the project site and/or pre-development, implementation, and post-development photographs of the project site from consistent, documented photographic points.

3. **Water Quality and Biological Monitoring**

A. The applicant shall provide to the Commission monitoring data (as is also required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code (i.e. AB411)) for the project period and for comparative periods when the project was not in place (e.g. 3 months before project implementation and 3 months after project implementation) for (1) the quantities and types of pollutants (both organic and heavy metals) being discharged from the outfall, (2) the quantities and types of pollutants (both organic and heavy metals) present in the waters of Aliso Creek, the surf zone and vicinity where Aliso Creek discharges to coastal waters, and in near shore waters, and (3) the effects of the project on the marine environment in the vicinity of the outfall and Aliso Creek County Beach, including beneficial/adverse effects on human health and marine life. If the above described monitoring is not required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code for any reason, the applicant is still required to perform the monitoring in compliance with this coastal development permit.

B. If not already submitted by the applicant under item A above, the applicant shall submit copies of the following data, reports, analyses, and regulatory responses: 1) complete copies of all monthly, quarterly, semi-annual, and annual monitoring

reports required under Order No. 95-107 AWMA NPDES Permit No. CA0107611 (or any subsequently approved NPDES permit) along with summaries of violations of Order No. 95-107; 2) written responses from the RWQCB to the applicant regarding the respective monthly, quarterly, semi-annual, and annual monitoring reports required under Order No. 95-107; 3) monitoring, analysis and regulatory responses related to RWQCB Clean Up and Abatement Order 99-211 and RWQCB 13225 Directive issued on March 2, 2001; 4) monitoring, analysis, and regulatory responses regarding compliance with the California Health & Safety Code (as amended by AB411) related to water quality at Aliso Beach including a complete log of all water quality monitoring and beach posting and closures at Aliso Beach; 5) copies of any reports generated under the U.S. Army Corps of Engineers *Aliso Creek Watershed Management Study*;

C. The applicant shall also monitor and provide data and analysis regarding (1) the effects of the project on riparian vegetation and other biological resources (including, but not limited to, tidewater goby and/or their habitat) along the banks and within Aliso Creek in the area of the creek affected by the proposed berm; (2) the effects of the proposed project upon biological resources at the AWMA outfall; and (3) the effects of the project on the adjacent Ben Brown's restaurant property, including any minor flooding which may occur. The monitoring of riparian vegetation and biological resources shall take the form of a biological survey and analytical report prepared by an appropriately trained biologist prepared in accordance with the standards of current professional practice. The biological survey and analysis shall document conditions prior to project construction, during project implementation, and after removal of the berm and restoration of the project area. The biological survey and analysis shall document any adverse impacts and provide recommendations to address any such impacts. In addition to other biological resource impacts, the biological survey and analysis shall specifically address any impacts (temporary and long term) which the project may have upon suitable habitat for tidewater goby. The applicant shall mitigate any adverse impacts through the coastal development permit process. The monitoring area shall include the entire stream corridor downstream of the berm and any area inland of the berm affected by the ponding of creek water behind the berm.

D. The applicant shall submit the results of the monitoring required in Special Condition 3.A., 3.B. and 3.C. above to the Executive Director by March 15, 2002. The monitoring results shall be accompanied by an analysis prepared by an appropriately licensed professional which demonstrates whether applicable water quality standards (e.g. in stream Basin Plan objectives for Aliso Creek and Ocean Plan standards) were met during the project period and when the project was not operational. The analysis shall indicate whether Aliso Creek County Beach was posted or closed pursuant to the requirements of the California Health & Safety Code during the project period and whether the proposed project was operational during any postings or closures. The analysis shall contain a determination (including the basis on which the determination was made)of whether the proposed project reduced beach postings or closures during the project period and whether other non-project related factors may have contributed to any observed reduction in beach postings or closures. The analysis shall also contain a determination (including the basis on which the determination was made) of whether the proposed

project had any beneficial/adverse impacts upon human health and marine life including any such impacts at the outfall, in near shore waters, in the surf zone or in Aliso Creek. All analyses and determinations shall include the method of analysis as well as publication of, or clearly cited references to, the data used in the analysis and determination.

4. **Removal of berm prior to October 15, 2001 to prevent flooding**. Notwithstanding Special Condition No. 1 above, if, prior to October 15, 2001, the National Weather Service predicts that a significant storm event will occur prior to October 15, 2001 which could cause flooding in Aliso Creek, the proposed berm shall be removed prior to the forecasted date of the storm event so that no flooding will occur. For purposes of this condition, a "significant storm event" shall be defined as: an event of one inch or more of rainfall within a 24 hour period in any area which drains into the watershed of Aliso Creek.

5. **Prior Conditions**

Unless specifically altered by this amendment, all regular and special conditions attached to coastal development permit 5-97-316 remain in effect.

Special Conditions for Coastal Development Permit Amendment A-5-LGB-166-A4:

1. **Removal of Development.** The diversion of up to a twenty-four (24) hour average flow rate of five (5) cubic feet per second (i.e., 3.23 million gallons per day) of the water flow of Aliso Creek approved by this permit is authorized only for the 2001 summer season from May 1, 2001 through October 15, 2001. In no case shall the diverted flows exceed seven (7) cubic feet per second (i.e., 4.52 million gallons per day) at any time. This permit does not authorize the diversion to continue past October 15, 2001. All structural development, except for the buried 12 inch PVC connecting pipe, shall be removed as quickly as possible prior to the rainy season but in no case shall any development remain after October 25, 2001. The Aliso Creek end of the connecting pipe shall be capped as quickly as possible prior to the rainy season but in no case shall it be capped any later than October 25, 2001.

2. **Restoration**. The bed and banks of Aliso Creek disturbed by the approved project shall, after the removal of the berm and pipe, be restored, at a minimum, to the condition in which they existed prior to construction of the berm and installation of the pipe. As part of the restoration, the applicant shall remove all non-native invasive plant species from the project area. In addition, as part of the restoration the applicant shall re-vegetate for erosion control purposes the upland areas adjacent to the creek which were disturbed by construction activity. The applicant shall document and submit evidence of restoration of the creek bed and banks to the Executive Director by March 15, 2002. Documentation shall include the biological survey of the project area required in Special Condition 3 of this Coastal Development Permit Amendment and pre-construction and post-restoration topographic surveys of the project site and/or pre-development, implementation, and post-development photographs of the project site from consistent, documented photographic points.

3. Water Quality and Biological Monitoring

A. The applicant shall provide to the Commission monitoring data (as is also required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code (i.e. AB411)) for the project period and for comparative periods when the project was not in place (e.g. 3 months before project implementation and 3 months after project implementation) for (1) the quantities and types of pollutants (both organic and heavy metals) being discharged from the outfall, (2) the quantities and types of pollutants (both organic and heavy metals) present in the waters of Aliso Creek, the surf zone and vicinity where Aliso Creek discharges to coastal waters, and in near shore waters, and (3) the effects of the project on the marine environment in the vicinity of the outfall and Aliso Creek County Beach, including beneficial/adverse effects on human health and marine life. If the above described monitoring is not required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code for any reason, the applicant is still required to perform the monitoring in compliance with this coastal development permit.

B. If not already submitted by the applicant under item A above, the applicant shall submit copies of the following data, reports, analyses, and regulatory responses: 1) complete copies of all monthly, quarterly, semi-annual, and annual monitoring reports required under Order No. 95-107 AWMA NPDES Permit No. CA0107611 (or any subsequently approved NPDES permit) along with summaries of violations of Order No. 95-107; 2) written responses from the RWQCB to the applicant regarding the respective monthly, quarterly, semi-annual, and annual monitoring reports required under Order No. 95-107; 3) monitoring, analysis and regulatory responses related to RWQCB Clean Up and Abatement Order 99-211 and RWQCB 13225 Directive issued on March 2, 2001; 4) monitoring, analysis, and regulatory responses regarding compliance with the California Health & Safety Code (as amended by AB411) related to water quality at Aliso Beach including a complete log of all water quality monitoring and beach posting and closures at Aliso Beach; 5) copies of any reports generated under the U.S. Army Corps of Engineers *Aliso Creek Watershed Management Study*;

C. The applicant shall also monitor and provide data and analysis regarding (1) the effects of the project on riparian vegetation and other biological resources (including, but not limited to, tidewater goby and/or their habitat) along the banks and within Aliso Creek in the area of the creek affected by the proposed berm; (2) the effects of the proposed project upon biological resources at the AWMA outfall; and (3) the effects of the project on the adjacent Ben Brown's restaurant property, including any minor flooding which may occur. The monitoring of riparian vegetation and biological resources shall take the form of a biological survey and analytical report prepared by an appropriately trained biologist prepared in accordance with the standards of current professional practice. The biological survey and analysis shall document conditions prior to project construction, during project implementation, and after removal of the berm and restoration of the project area. The biological survey and analysis shall document any adverse impacts and provide recommendations to address any such impacts. In addition to other biological resource impacts, the biological survey and analysis shall specifically

address any impacts (temporary and long term) which the project may have upon suitable habitat for tidewater goby. The applicant shall mitigate any adverse impacts through the coastal development permit process. The monitoring area shall include the entire stream corridor downstream of the berm and any area inland of the berm affected by the ponding of creek water behind the berm.

D. The applicant shall submit the results of the monitoring required in Special Condition 3.A., 3.B. and 3.C. above to the Executive Director by March 15, 2002. The monitoring results shall be accompanied by an analysis prepared by an appropriately licensed professional which demonstrates whether applicable water quality standards (e.g. in stream Basin Plan objectives for Aliso Creek and Ocean Plan standards) were met during the project period and when the project was not operational. The analysis shall indicate whether Aliso Creek County Beach was posted or closed pursuant to the requirements of the California Health & Safety Code during the project period and whether the proposed project was operational during any postings or closures. The analysis shall contain a determination (including the basis on which the determination was made)of whether the proposed project reduced beach postings or closures during the project period and whether other non-project related factors may have contributed to any observed reduction in beach postings or closures. The analysis shall also contain a determination (including the basis on which the determination was made) of whether the proposed project had any beneficial/adverse impacts upon human health and marine life including any such impacts at the outfall, in near shore waters, in the surf zone or in Aliso Creek. All analyses and determinations shall include the method of analysis as well as publication of, or clearly cited references to, the data used in the analysis and determination.

4. **Removal of berm prior to October 15, 2001 to prevent flooding.** Notwithstanding Special Condition No. 1 above, if, prior to October 15, 2001, the National Weather Service predicts that a significant storm event will occur prior to October 15, 2001 which could cause flooding in Aliso Creek, the proposed berm shall be removed prior to the forecasted date of the storm event so that no flooding will occur. For purposes of this condition, a "significant storm event" shall be defined as: an event of one inch or more of rainfall within a 24 hour period in any area which drains into the watershed of Aliso Creek.

5. **Preservation of Parking.** Construction activities and the staging or storage of construction equipment or material in the public parking lot inland of Pacific Coast Highway adjacent to Aliso Creek shall not displace or obstruct access to any parking spaces within the lot between May 28, 2001 (i.e. Memorial Day weekend) and September 6, 2001 (i.e. Labor Day weekend).

6. **Prior Conditions**

Unless specifically altered by this amendment, all regular and special conditions attached to coastal development permit A-5-LGB-97-166 remain in effect.

Special Conditions for Coastal Development Permit Amendment 5-83-959-A8:

1. **Duration of Diversion**. The diversion of up to a twenty-four (24) hour average flow rate of five (5) cubic feet per second (i.e., 3.23 million gallons per day) of the water flow of Aliso Creek approved by this permit amendment is authorized only for the 2001 summer season from May 1, 2001 through October 15, 2001. In no case shall the diverted flows exceed seven (7) cubic feet per second (i.e., 4.52 million gallons per day) at any time. This permit amendment does not authorize the diversion to continue past October 15, 2001.

2. **Change to Previously Imposed Special Condition No. 6**. Special Condition No. 6 of permit A-61-76 regarding "Water Quality" shall be replaced with the following:

   The effluent discharged from the approved outfall shall comply with the requirements of "Order No. 95-107, NPDES Permit No. CA0107611, Waste Discharge Requirements for the Aliso Water Management Agency, Orange County, Discharge to the Pacific Ocean Through the Aliso Water Management Agency Ocean Outfall" issued by the California Regional Water Quality Control Board, San Diego Region.

3. **Water Quality and Biological Monitoring**

   A. The applicant shall provide to the Commission monitoring data (as is also required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code (i.e. AB411)) for the project period and for comparative periods when the project was not in place (e.g. 3 months before project implementation and 3 months after project implementation) for (1) the quantities and types of pollutants (both organic and heavy metals) being discharged from the outfall, (2) the quantities and types of pollutants (both organic and heavy metals) present in the waters of Aliso Creek, the surf zone and vicinity where Aliso Creek discharges to coastal waters, and in near shore waters, and (3) the effects of the project on the marine environment in the vicinity of the outfall and Aliso Creek County Beach, including beneficial/adverse effects on human health and marine life. If the above described monitoring is not required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code for any reason, the applicant is still required to perform the monitoring in compliance with this coastal development permit.

   B. If not already submitted by the applicant under item A above, the applicant shall submit copies of the following data, reports, analyses, and regulatory responses: 1) complete copies of all monthly, quarterly, semi-annual, and annual monitoring reports required under Order No. 95-107 AWMA NPDES Permit No. CA0107611 (or any subsequently approved NPDES permit) along with summaries of violations of Order No. 95-107; 2) written responses from the RWQCB to the applicant regarding the respective monthly, quarterly, semi-annual, and annual monitoring reports required under Order No. 95-107; 3) monitoring, analysis and regulatory responses related to RWQCB Clean Up and Abatement Order 99-211 and RWQCB 13225 Directive issued on March 2, 2001; 4) monitoring, analysis, and regulatory responses regarding compliance with the California Health & Safety Code (as amended by AB411) related to water quality at Aliso Beach including a complete log

of all water quality monitoring and beach posting and closures at Aliso Beach; 5) copies of any reports generated under the U.S. Army Corps of Engineers *Aliso Creek Watershed Management Study*;

C. The applicant shall also monitor and provide data and analysis regarding (1) the effects of the project on riparian vegetation and other biological resources (including, but not limited to, tidewater goby and/or their habitat) along the banks and within Aliso Creek in the area of the creek affected by the proposed berm; (2) the effects of the proposed project upon biological resources at the AWMA outfall; and (3) the effects of the project on the adjacent Ben Brown's restaurant property, including any minor flooding which may occur. The monitoring of riparian vegetation and biological resources shall take the form of a biological survey and analytical report prepared by an appropriately trained biologist prepared in accordance with the standards of current professional practice. The biological survey and analysis shall document conditions prior to project construction, during project implementation, and after removal of the berm and restoration of the project area. The biological survey and analysis shall document any adverse impacts and provide recommendations to address any such impacts. In addition to other biological resource impacts, the biological survey and analysis shall specifically address any impacts (temporary and long term) which the project may have upon suitable habitat for tidewater goby. The applicant shall mitigate any adverse impacts through the coastal development permit process. The monitoring area shall include the entire stream corridor downstream of the berm and any area inland of the berm affected by the ponding of creek water behind the berm.

D. The applicant shall submit the results of the monitoring required in Special Condition 3.A., 3.B. and 3.C. above to the Executive Director by March 15, 2002. The monitoring results shall be accompanied by an analysis prepared by an appropriately licensed professional which demonstrates whether applicable water quality standards (e.g. in stream Basin Plan objectives for Aliso Creek and Ocean Plan standards) were met during the project period and when the project was not operational. The analysis shall indicate whether Aliso Creek County Beach was posted or closed pursuant to the requirements of the California Health & Safety Code during the project period and whether the proposed project was operational during any postings or closures. The analysis shall contain a determination (including the basis on which the determination was made)of whether the proposed project reduced beach postings or closures during the project period and whether other non-project related factors may have contributed to any observed reduction in beach postings or closures. The analysis shall also contain a determination (including the basis on which the determination was made) of whether the proposed project had any beneficial/adverse impacts upon human health and marine life including any such impacts at the outfall, in near shore waters, in the surf zone or in Aliso Creek. All analyses and determinations shall include the method of analysis as well as publication of, or clearly cited references to, the data used in the analysis and determination.

4. **Previously Imposed Conditions**. Unless specifically altered by this amendment, all regular and special conditions attached to coastal development permit 5-83-959 remain in effect.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The proposed project is to re-authorize the temporary diversion of low-flow summertime discharges of Aliso Creek into an existing sewage outfall which outlets 1.5 miles offshore for one summer season only. The first diversion was approved by the Commission in 1998 for the period of May 1, 1998 through October 15, 1998. Subsequent amendments have authorized the diversion to occur during the same periods in 1999 and 2000. The applicant is now requesting authorization to install the diversion between May 1, 2001 through October 15, 2001.

The diversion would occur by building a berm in Aliso Creek, approximately 300 feet inland of Coast Highway (Exhibits 1 and 2). The proposed sand berm would be four feet high above the creek bed, 24 feet wide, and sixty feet long. The proposed berm would be lined with plastic to prevent erosion and allow for ponding of water behind the berm. The proposed berm would have an 18" deep notch at the top in the middle at an elevation three feet high above the creek bed to allow for overflow to prevent flooding in the event the pump fails or water ponds too rapidly. The water which ponds behind the berm would then be pumped, at a rate of about five cubic feet per second, via an existing pipe into the existing nearby Aliso Water Management Agency ("AWMA") pipeline. The existing PVC pipe, which was previously approved by the Commission and which remains in place, is 200 feet long and is buried two feet below grade and crosses through a previously graded and surfaced terrace and an existing public parking lot. To minimize pump noise, the proposed pump would be electric and be housed in an unused building owned by AWMA.

As conditioned by the conditions of CDPs 5-97-316, A-5-LGB-97-166, and 5-83-959, the proposed development could only occur during the period of May 1, 1998 through October 15, 1998. Also, the Commission's approval only authorized diversion of flows, on average, of up to 5 cubic feet per second (3.23 million gallons per day) during a 24 hour period. In addition, peak flows could not exceed 7 cubic feet per second (4.52 million gallons per day). Due to higher than anticipated summertime flows in Aliso Creek, which exceeded pumping capacity, outfall line capacity, and approved diversion quantities, the applicant did not implement the proposed project in 1998. Subsequently, the applicant has received approval for amendments which have authorized the diversion to occur between May 1st and October 15th in 1999 and 2000. The diversion was operational for 15 days in 1999 and approximately 3 months in 2000.

The proposed project involves three separate permit amendment actions. First, permit amendment application (A-5-LGB-97-166-A3) covers the portion of the proposed project within the certified area of the City of Laguna Beach. In 1997, the City of Laguna Beach approved the entire proposed project, including the portion of the berm within the creek bed. The City's coastal development permit was subsequently appealed to the Commission. The Commission found substantial issue, consequently the City's permit was re-characterized. The City-issued coastal development permit CDP 97-19 was appealed to the Commission in 1997 based on inconsistency with the certified local coastal program regarding flooding and offshore water quality. On July 9, 1997, the Commission found that the appeal raised a substantial issue. Therefore, on February 3, 1998, the Commission held a De Novo hearing on the item and approved the proposed project subject to several conditions. Since the Commission approved the project at the De Novo stage,

the Commission retains authority over the permit for condition compliance and amendment. An amendment to A-5-LGB-97-166 was required to authorize the proposed development to occur in 1999 and 2000. Another amendment is necessary to authorize the proposed development to occur in 2001.

Second, permit amendment application 5-97-316-A4 covers only the portion of the proposed project within Coastal Commission jurisdiction. Basically, this is the portion of the proposed berm within the bed of Aliso Creek and the offshore discharge. Aliso Creek at the project location is submerged lands and thus is an area of retained Commission jurisdiction. The offshore discharge would be located seaward of the mean high tide line and thus is also in the Commission's area of retained permit jurisdiction. Similar to Coastal Development Permit A-5-LGB-97-166, Coastal Development Permit 5-97-316 has special conditions which restrict the diversion to May 1st through October 15th and must be amended to authorize the diversion to occur in 2001.

Third, another amendment to permit A-61-76 (a.k.a. 5-83-959[1]) is necessary. On May 5, 1976, the California Coastal Zone Conversation Commission, the Commission's predecessor, approved on appeal permit A-61-76 for the construction of the 48-inch AWMA ocean outfall. The approved outfall discharges secondary treated effluent into the ocean. The permit was conditioned to limit effluent as a means to regulate development served by the outfall. In the early 1980's, several amendments to the permit were approved to increase effluent limits. However, the type of discharge proposed into the outfall is not covered under the previously approved permit and three previous permit amendments. Therefore, in 1998 the Commission approved an amendment, 5-83-959-A4, authorizing the discharge of summertime flows from Aliso Creek into the outfall during 1998. Another permit amendment was required to change the period of authorized activity to 1999 and 2000. The applicant again is applying for another amendment to authorize the proposed development to occur in 2001.

The outfall's outlet has a diffuser to slow and diffuse the discharge from the outfall, minimizing the erosive force of the discharge. The outfall pipe is 1.5 miles long from shore to the nearshore end of the diffuser. At this point, the diffuser is 170 feet below Mean Lowest Low Water ("MLLW") level. The diffuser extends from this point another 1,200 feet seaward, at a depth of 195 feet MLLW. The outfall's capacity is 50 million gallons per day ("MGD"). The current monthly discharge typically does not exceed 20 MGD. Therefore, the outfall typically operates below capacity.

The applicant is proposing this project to temporarily remedy a problem of polluted water ponding at Aliso Creek County Beach, where Aliso Creek outlets into the ocean. The low flows of Aliso Creek during the dry summertime are not strong enough to breach the sand at the beach, resulting in water ponding at the beach. The concentration of pollutants in the water is higher during the summer than in the winter, due to the lower flows during the dry summer season. Thus, the ponding water becomes stagnant and, in combination with higher concentrations of pollutants, poses a health hazard to beachgoers. The number of beachgoers is generally higher in the summer than in the winter, increasing the number of people at risk. Therefore, contamination levels pose an adverse effect on recreational use of the beach.

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[1] There is no permit 5-83-959. Rather, this number was created to allow for amendments to the original permit, since it was a Proposition 20 Appeal, which does not follow the Commission's current numbering system.

B. WATER QUALITY

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes*.

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

City of Laguna Beach Certified Local Coastal Program Policy 4-H states (standard of review for A-5-LGB-166-A4 and upland portions of 5-83-959-A8):

> *Oppose activities which degrade the quality of offshore waters.*

The proposed project would result in the diversion of polluted, low flow summertime discharges from Aliso Creek into an existing outfall owned by the Aliso Water Management Agency ("AWMA") which outlets 1.5 miles offshore. This would result in diversion of the polluted water from the beach to the offshore waters.

Due to littoral drift, sand from areas adjacent to the mouth of Aliso Creek drifts into the creek's mouth. This results in the creation of berms across the creek's mouth, which prevents the creek's water from entering the ocean. Therefore, the creek's polluted water ponds behind the berm at the creek's mouth, right on the popular and heavily used Aliso Creek County Beach. In a March 4, 1997 letter to the San Diego Regional Water Quality Control Board, the Orange County Health Care Agency indicated that the mouth of Aliso Creek ". . . is regarded as chronically contaminated and is therefore permanently posted with . . . signs stating, 'Keep Out', 'Contaminated Water'." In addition, the mouth of Aliso Creek is listed as a Clean Water Act Section 303(d) impaired water body.

Also, more stringent water quality testing and posting/closure requirements were implemented by the State of California through the passage of AB411 in 1999. A log of these postings and closures maintained by the Orange County Health Care Agency indicates that Aliso Beach was posted or closed 22 times between July 28, 1999 and April 10, 2001 because recreational waters exceeded California Ocean Water-Contact Sports Standards.

The problem of ponding polluted water and the attendant public health risks are greater during the summer, when creek flows are low and use of the beach by the public is at its highest. Low flows mean that the concentration of pollution in the water is higher. This contrasts with heavy winter flows in which the pollution is diluted because of the high volume water from heavy rainfall. Low creek flows also mean that the water is not forceful enough to cut through the sand berms at the creek's mouth, so the water collects behind the berm. This pool of fresh water on the beach tends to attract use by beach goers. In the past, County beach staff attempted to fix the problem by breaching the berm to allow the ponded water to drain into the ocean. However, this method simply released the contaminated water into the surfzone where more people were exposed to contaminated water. More recently (1998 to present), the County has implemented the subject creek diversion project which captures the creek flows at a location inland of PCH (away from beach users) and diverts the water 1.5 miles offshore. The proposed amendments would authorize this diversion to occur in 2001.

1. Water Contamination – Sources and Allowable Limits

a. Bacteriological pollutants

Section 7958 of the California Code of Regulations (Title 17, Chapter 5, Subchapter 1, Group 10, Article 4), as amended by AB411 in 1999, contains prescribed standards for maximum allowable concentrations of coliform organisms at public beaches or water-contact sports areas as follows:

> *(a) The minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas shall be as follows:*
> *(1) Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed:*
> *(A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or*
> *(B) 10,000 total coliform bacteria per 100 milliliters; or*
> *(C) 400 fecal coliform bacteria per 100 milliliters; or*
> *(D) 104 enterococcus bacteria per 100 milliliters.*
> *(2) Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:*
> *(A) 1,000 total coliform bacteria per 100 milliliters; or*
> *(B) 200 fecal coliform bacteria per 100 milliliters; or*
> *(C) 35 enterococcus bacteria per 100 milliliters.*

Section 116070 of the California Health and Safety Code (Division 104, Chapter 5, Article 6) defines "water-contact sport" as:

> *…water-contact sport means any sport in which the body of a person comes into physical contact with water, including but not limited to swimming, surfboarding, paddleboarding, skin diving, and water-skiing. It does not include boating or fishing.*

The ocean waters off Aliso Creek County Beach spanning both sides of the mouth of Aliso Creek are water-contact sports areas which are tested for coliform. Coliform is a bacteriological agent which indicates the presence of pathogens that pose a risk to human health. The proposed

project would be undertaken primarily to reduce the problem of high levels of coliform at Aliso Creek County Beach. As noted earlier, these high levels of coliform have required 22 postings and/or beach closures since summer of 1999.

There are at least two possible sources of water contamination at Aliso Beach. During the substantial issue phase of appeal A-5-LGB-97-166 and the Commission's initial approval of Coastal Development Permit 5-97-316 and Amendment 5-83-959, it was suggested that high coliform levels at Aliso Beach may, in large part, be attributable to discharges from Aliso Creek. Data from 1996 and 1997 provided by the Orange County Health Care Agency demonstrated that, in many instances, coliform organism concentration found at the mouth of Aliso Creek, where the present pollution problem occurs, exceeds the limit of 1,000 per 100 ml., and was sometimes double the allowable limit. On the other hand, the coliform organisms in the surf zone waters off Aliso Beach rarely exceed 100 per 100 ml., well below the prescribed standard. Only at the Aliso-Middle station near the creek did the concentrations rise above 100 per 100 ml., and then not by much. Accordingly, data obtained in 1996 and 1997 indicate that coliform levels are generally lower at points farther from, rather than nearer to, Aliso Creek. Since the only high levels of coliform in the ocean occurred at the creek's mouth, and testing of the creek's waters also indicated high levels of coliform, the major source of coliform in the ocean is likely discharges from Aliso Creek. Additional data –which provides results of surfzone and creek water testing through October 11, 2000 (Exhibits 13-15)- suggests that, similar to the observations made regarding the data from 1996 and 1997, Aliso Creek is the primary contributor to coliform contamination at Aliso Beach.

Another possible source of pollution at Aliso Beach could be discharges from the AWMA outfall (which discharged 1.5 miles offshore) washing back to the beach through tidal action. Due to the nature of treated sewage, concentrations of pollutants at the outfall are high. However, data from 1997 and 1998 regarding effluent from the AWMA outfall, indicated that bacteriological water quality in the nearshore zone (i.e., 1,000 feet offshore) and above the outfall at a depth of 25-50 feet below the surface of the ocean, met State Ocean Water-Contact Sports standards. Meanwhile, as noted above, water quality in the surf zone (i.e., the water area immediately adjacent to the beach) was poor. This information suggested, once again, that high coliform levels at Aliso Beach could be attributable to discharges from Aliso Creek rather than discharges from the AWMA outfall.

Monitoring data from the AWMA outfall for May 2000 through October 2000 suggest that conditions observed from the 1997 and 1998 data have not changed (Exhibit 15). Between May 2000 and October 2000 coliform concentrations closest to the outfall were in conformance with AWMAs NPDES Order No. 95-107 (Exhibit 4) and State Ocean Water-Contact Sports standards. Meanwhile, coliform concentrations in the surfzone at the mouth of Aliso Creek exceeded State standards. Letters from the RWQCB dated July 31, 2000, August 22, 2000, September 25, 2000, and April 12, 2001 to AWMA –which respond to AWMA's monthly outfall monitoring reports- indicate the RWQCB's opinion that the high coliform concentrations observed in the surfzone are not being caused by discharges from the outfall (Exhibit 3). This opinion suggests that the high coliform concentrations at Aliso Beach are more likely from sources such as Aliso Creek rather than the outfall.

b. Pollutants Other Than Coliform

The diversion of Aliso Creek's flows is being proposed primarily to resolve the problem of coliform trapped at the beach, which poses a human health risk. However, because Aliso Creek's flows contain general storm runoff from a 36 square mile watershed drainage area, it contains other pollutants besides bacteriological pollutants. At high levels, these other pollutants which wash off from streets through storm drains and from agricultural lands also pose a risk to human health and marine life.

The RWQCB has imposed limitations in its NPDES permit for the AWMA outfall for a variety of pollutants (Exhibit 4). Limitations are imposed on: 1) major constituents and properties of wastewater such as total suspended solids, pH balance, turbidity, and oil & grease.; 2) materials such as ammonia, arsenic, copper, lead, mercury, and zinc which are toxic to marine life, 3) non-carcinogenic materials which are toxic to humans, and 4) carcinogenic (i.e., cancer-causing) materials such as benzene, chloroform, and DDT which are toxic to humans.

Similar to prior years (1998 and 1999), data obtained for the year 2000 monitoring period indicate that pH levels and levels of non-coliform pollutants in the outfall, such as total suspended solids, are within the limits prescribed by the RWQCB's NPDES permit for the AWMA outfall. Accordingly, since prior diversions did not cause State water quality standards to be exceeded at the outfall it is not anticipated that the proposed diversion would result in a significant increase in pollutant concentrations other than coliform at the outfall.

2. Diversion as an Interim Measure

The pipeline into which Aliso Creek's flows are proposed to be diverted discharges secondary sewage at an outfall located 1.5 miles offshore. The pipeline and outfall are operated by the Aliso Water Management Agency ("AWMA"). Secondary sewage is not raw sewage. Secondary sewage has been treated for removal of suspended solids but has not been chlorinated or otherwise treated to kill bacteriological contaminants such as coliform and enterococcus.

In order to authorize the diversion of summertime flows from Aliso Creek into the pipeline and outfall the RWQCB approved an addendum to its Order N. 95-107, NPDES ("National Pollutant Discharge Elimination System") Permit No. CA0107611 (Exhibit 4). The NPDES permit regulates discharges from the AWMA outfall. The addendum approves the proposed diversion. In addition, the addendum sets a limit on the proposed diversion of Aliso Creek flows into the outfall at 4.52 million gallons per day. The addendum also prohibits diversion of the creek between October 16th and April 30th. The addendum further requires the normal outfall-monitoring program to include the diverted creek flows. The addendum does not raise the limits on the types of pollutants which can be discharged through the outfall. Therefore, even with the addition of the pollution from the creek, AWMA is still responsible for ensuring that the effluent discharged from its outfall are within the limits currently prescribed by the RWQCB for the effluent without the creek flows. The NPDES requirements, as amended by the addendum, remain in place for the proposed 2001 diversion season.

RWQCB staff has indicated that the current levels of coliform and bacteriological pollutants in the secondary treated sewage discharged from the outfall are already significantly higher than that detected in the creek. This is because secondary treated sewage is not required to be treated to kill bacteriological contaminants. RWQCB staff has indicated that the addition of bacteriological

contaminants from the creek's flows would not result in a significant proportionate increase in bacteriological contaminants being discharged from the outfall. Given this fact along with the fact that, except at the creek's mouth, levels of coliform in ocean waters are currently within acceptable standards for human contact, the RWQCB staff does not believe the proposed diversion of creek flows would result in levels of coliform in the ocean increasing to levels above accepted standards for human contact.

The pollutants in the sewage effluent come out of the outfall, mix with the ocean water at the outlet and become diluted. Immediately around the outfall's outlet, pollutant levels are high. However, once the pollutants have been diluted and travel beyond the mixing zone, pollutant levels fall. Therefore, as noted above, the higher levels of bacteriological pollutants from the sewage coming out of the outfall 1.5 miles offshore has not translated into the same high levels at the surf zone and nearshore waters.

Water quality monitoring data from the year 2000 diversion suggests that, even thought the creek's flows were diverted into the outfall, the coliform in the creek's flow which comes out of the outfall becomes diluted and does not translate into high levels of coliform closer to shore. This conclusion is reinforced by RWQCB letters to AWMA which state that coliform concentrations at the outfall –during both diversion and non-diversion periods- are not exceeding the standards established in the NPDES permit.

In fact, data from diversions during 1999 and 2000 suggest that the diversion does reduce the quantity of beach postings and closures. An analysis prepared by the Orange County Health Care Agency which is summarized in a letter dated March 21, 2001, reviewed surfzone water quality data when the diversion was operational and non-operational (Exhibit 12). The letter states "…[a]lthough enterococcus, total and fecal coliform bacterial levels remain elevated in Aliso Creek, the actual number of Ocean Water Contact Sports Single Sample Standards violations (for the three indicators combined) and subsequent posting of warning signs at selected surf zone monitoring locations along Aliso Beach were fewer during the times the diversion was operational during 1999 and 2000." According to the analysis, in 1999 water quality standards were exceeded 5 times when the diversion was not in operation and 2 times when the diversion was operational. In 2000, water quality standards were exceeded 8 times when the diversion was not operational and 3 times when it was operational. This information suggests that the diversion does reduce the quantity of water quality standard violations at Aliso Beach.

Meanwhile, the study does indicate that even when the diversion is in place, water quality standards at Aliso Beach are still occasionally exceeded. However, during a presentation by the applicant to the RWQCB in May 2001, the applicant explained that 3 high tide events breached the berm when it was in place during the 2000 summer season. These breachings released creek water from behind the berm to the surfzone, causing the 3 water quality standard violations. This suggests that, if the berm had not been accidentally breached, water quality standards would not have been exceeded. However, there has been no explanation of the reason water quality standards were exceeded in 1999 when the berm was in place. Therefore, the berm appears to reduce the number of occurrences of water quality standard violations at Aliso Beach. However, it cannot be conclusively stated that the berm is wholly responsible for reducing postings and closures at Aliso Beach. Thus, at the creek's mouth where coliform levels currently exceed acceptable levels, the proposed project can be expected to reduce coliform counts and increase water quality at Aliso Beach but it may not completely address the water contamination issue.

If nothing else, the proposed project will not make the current situation at Aliso Beach worse. If the project were not to be implemented, the County would breach the mouth of Aliso Creek and the coliform contaminated water would enter the ocean anyway. If the same coliform were to be discharged into the outfall and wash back onshore, the situation would be no different. However, the RWQCB's analysis of the situation indicates that coliform is not washing back onshore. Meanwhile, another question is whether discharge of the creek's flows, with its levels of coliform which exceed Health and Safety Code standards for safe human contact, reduce the human health risk if those contaminants were moved away from the recreational beach area at the mouth of Aliso Creek and discharged 1.5 miles offshore. Given the information about the reduction of beach postings and closures when the diversion is operational, it appears that the diversion does reduce human health risk at Aliso Beach. In addition, given the information which suggests that water quality standards are not exceeded at the outfall when the diversion is operational, it appears that the diversion does not increase human health risk at the outfall.

Furthermore, since the diversion of the polluted creek water to the outfall hasn't noticeably changed the quality of water at the outfall, it is not anticipated that the diversion has any significant adverse effect upon marine life in the vicinity of the outfall. However, detailed biological monitoring –which has not been submitted to the Commission- would be necessary to make a conclusive statement regarding biological impacts at the outfall. Meanwhile, it is notable that the regulatory requirements under which the RWQCB operate requires the RWQCB to determine where shellfish harvesting areas exist in coastal waters and to monitor the coliform in those areas. The RWQCB has determined that no shellfish harvesting areas exist in the coastal waters affected by the AWMA outfall. Therefore, there are no shellfish in the area which would be adversely affected by the proposed addition of coliform from the diverted creek flows.

3. Status of Efforts to Clean Up the Aliso Creek Watershed & Future Need for the Diversion

The applicant has chosen the proposed project in part because it is inexpensive ($8,500 versus $100,000 for treatment) and is only intended to be a temporary solution until an overall watershed management plan for reducing pollutants in Aliso Creek can be formulated. The County characterizes the proposed diversion as the short term method of addressing the water contamination problem at Aliso Beach while the mid-term and long-term plans are devised and implemented.

The Aliso Creek Watershed contains approximately 35 square miles, a portion of which is within the coastal zone (Exhibit 1). This watershed is comprised of a variety of sub-watersheds including J03P02, Dairy Fork, and Munger (Exhibit 1). The water quality problems experienced at Aliso Beach are a result of contamination generated throughout the watershed. Elimination of the need for an "end of pipe" or, in this case, "end of stream" solution such as the diversion will be dependent upon addressing the water quality issues throughout the watershed. A variety of events suggest that progress is occurring toward this end.

a. RWQCB Clean Up and Abatement Order 99-211 for J03P02 Sub-Watershed in Laguna Niguel

On December 28, 1999, the RWQCB issued Clean Up and Abatement Order 99-211 to the County of Orange, the Orange County Flood Control District, and the City of Laguna Niguel for the discharge waste with high fecal coliform bacteria levels from municipal storm drain outfall "J03P02"

into Sulphur Creek, a tributary to Aliso Creek (Exhibit 5). In response, the municipalities have been trying to identify the source of the contamination and implement measures to clean up the contamination. According to the JO3P02 Workplan Fourth Quarterly Progress Report (November 2000 – January 2001) dated February 28, 2001 these responses include (Exhibit 6): 1) extensive sampling in the J03P02 sub-watershed to identify sources; 2) construction and implementation of a diversion system to divert low flows discharging from the J03P02 outfall to the treatment plant for treatment; 3) construction of the "East Alicia Water Quality Wetland"; 4) testing of an end-of-pipe filtration and ultraviolet treatment system known as a "Clear Creek System"; 5) weekly street sweeping within the sub-watershed; 6) completion of design and seeking funding for a wetland system (known as the WETCAP project) designed to capture and treat 100% of low flows discharging from the J03P02 sub-watershed; 7) public outreach and education; among other efforts. Bacteriological monitoring results indicate that the quality of water being discharged from J03P02 is improving, but additional progress is needed. Improvements in the quality of discharges from J03P02 will have a positive affect on the quality of water in Aliso Creek. However, since the quantity of water discharging from this location is about 1% of the total volume of water passing through Aliso Creek, clean up of this single discharge point will not by itself eliminate the need for the creek diversion at the mouth of Aliso Creek. However, it is anticipated that the cumulative effect of cleaning up these individual locations will eventually eliminate the need for an "end of stream" solution.

b. Dairy Fork Basin Project and Munger Storm Drain Project

There are two projects within the Dairy Fork sub-watershed and the Munger sub-watershed nearing implementation (once permits are obtained) which are designed to enhance the assimilative capacity of the receiving waters at those points. The projects include the construction of a biofiltration basin in Dairy Fork and an infiltration/filtration basin at the outfall of the Munger storm drain. These measures essentially filter urban runoff prior to discharge into Aliso Creek.

c. RWQCB "13225" Directive

On March 2, 2001, the Executive Director of the RWQCB issued a Clean Water Code Section 13225 Directive to the municipalities located within the Aliso Creek Watershed including the County of Orange (Exhibit 7). This directive requires the various municipalities to implement an extensive water quality monitoring program throughout the watershed which is designed to identify contamination 'hot spots' (such as J03P02). The monitoring program was approved at the May 2001 RWQCB meeting and will be implemented immediately (Exhibit 8). Quarterly reports must be submitted to the RWQCB. Once any 'hot spots' are identified, the municipalities are required to implement structural and non-structural measures to address the contamination source. RWQCB staff anticipate relatively rapid identification of sources and implementation of projects from this directive.

d. U.S. Army Corps of Engineers *Aliso Creek Watershed Management Study*

As noted in previous Commission findings, the U.S. Army Corps of Engineers is in charge of an overall effort, the *Aliso Creek Watershed Management Study*, which is moving forward on its feasibility phase of the project to evaluate methods of reducing the amount of runoff and pollutants entering Aliso Creek. The Corps has identified preliminary solutions including the implementation of a detention basin and wetlands complex in the lower portions of Aliso creek to provide water filtration to improve water quality. The most recent update from the Corps on the Aliso Creek

Watershed Management Study is that they are finalizing the Feasibility Report, which should be in draft form by summer of 2001 and finalized in the fall of 2001. Implementation of the recommendations from the Corps study will require federal and local government cost-sharing. It is anticipated that it will be several years before actual projects identified in the study are in place.

4. Monitoring the Effects of the Diversion and Clean-Up of the Watershed

The RWQCB requires AWMA to monitor water at various surf zone (i.e., water area adjacent to the beach) monitoring stations, nearshore water (i.e., 1,000 feet offshore) monitoring stations, offshore water (i.e., below the ocean surface, above the outfall's outlet 1.5 miles offshore) monitoring stations, and creekside monitoring stations for bacteriological pollutants such as coliform which are hazardous to human health. This information can assist the Commission in evaluating the progress of clean up in the watershed and analysis of the effectiveness of the diversion and the impacts the diversion may have.

a. Within Aliso Creek Watershed

Water quality monitoring is occurring throughout the watershed. As noted above, this monitoring includes the sampling and analysis of water quality at J03PO2 required under the RWQCB Clean Up and Abatement Order 99-211. In addition, the RWQCB 13225 Directive includes sampling and analysis on various tributaries and in Aliso Creek.

b. At the Berm

The RWQCB NPDES Permit for the AWMA outfall and the diversion into the outfall requires monitoring at a location within the creek and inland of the berm to provide data about the quantity and quality of the water which is being put into the AWMA outfall line. Elements monitored are flowrate (continuous monitoring), CBOD (daily monitoring), Suspended Solids (daily monitoring), pH (daily monitoring), and total and fecal coliform (weekly).

c. Surfzone Monitoring

The RWQCB NPDES Permit for the AWMA outfall and the diversion into the outfall requires monitoring of the quality of water in the surfzone. There are 17 shoreline (surfzone) monitoring stations (known as S1 through S16). These stations monitor the quality of water in the surfzone radiating up and down the coast at 1,000 foot intervals from the intersection of the outfall line and the shoreline. Elements monitored are total and fecal coliform and enterococcus (at least twice weekly). According to the NPDES Monitoring and Reporting Program the purpose of the surf zone monitoring is "…to assess bacteriological conditions in areas used for body-contact activities (e.g. swimming); and to assess aesthetic conditions for general recreational uses (e.g. picnicking)." In addition, this monitoring data can potentially indicate whether the effluent being discharged 1.5 miles offshore is washing back to the shoreline.

Due to the monitoring requirements of the California Health and Safety Code, as amended by AB411, the surfzone monitoring locations are monitored more frequently than required by the NPDES permit. The County's program includes monitoring at least once per week and up to five times per week. The frequency of monitoring depends upon whether California Ocean Water-Contact Sports Standards are exceeded. If standards are exceeded, monitoring occurs more frequently.

d. Nearshore Monitoring

The RWQCB NPDES Permit for the AWMA outfall and the diversion into the outfall requires monitoring of the quality of water in the nearshore (1,000 feet offshore). There are 7 nearshore monitoring stations (known as N1 through N7). These nearshore stations also radiate up and down coast from the alignment of the outfall line including at the intersection of the outfall line and 1,000 feet offshore and from there at 500, 1,000, and 2,500 foot intervals. Elements monitored are total and fecal coliform and enterococcus. Under the NPDES permit, the reporting is normally monthly but can be suspended at the discretion of the RWQCB's Executive Officer. According to the NPDES Monitoring and Reporting Program the purpose of the near shore monitoring is "…to assess bacteriological conditions in areas used for body-contact activities (e.g. scuba diving) and where shellfish and/or kelp may be harvested; and to assess aesthetic conditions for general boating and recreational uses." Once again, this monitoring data can also potentially indicate whether the effluent being discharged 1.5 miles offshore is washing back to the shoreline.

e. Monitoring Offshore in the Vicinity of the Outfall

The RWQCB NPDES Permit for the AWMA outfall and the diversion into the outfall requires monitoring of the quality of water offshore in the vicinity of the outfall. There are 7 offshore monitoring stations (known as A1-A5, B1 and B2). These offshore stations are at the corners of a 1,000 foot by 1,000 foot square and at the center of the square centered above the outfall and 1 mile upcoast and one mile downcoast of this square. Elements monitored are total and fecal coliform and enterococcus, suspended solids, oil and grease, salinity, temperature, dissolved oxygen, light transmittance, and pH. All monitoring occurs monthly. According to the NPDES Monitoring and Reporting Program the purpose of the near shore monitoring is "…to determine compliance with the Ocean Plan; and to determine if the discharge causes significant impacts on the water quality within the ZID [zone of initial dilution] and beyond the ZID as compared to reference areas."

The NPDES permit also requires benthic monitoring around the outfall. Benthic monitoring is to occur annually, however, the frequency and form of the monitoring can be altered by the Executive Officer of the RWQCB. Monitoring includes dissolved sulfides, temperature, BOD, COD, particle size distribution, and 20 other chemical constituents. There is also an annual Kelp Bed monitoring requirement to assess whether wastes affect the areal extent and health of kelp beds.

5. Special Conditions and Conclusions

The Commission finds that it is necessary to limit the duration of the project to one summer season as proposed; specifically, between May 1, 2001 and October 15, 2001. The purpose of this limitation is to avoid long-term impacts to coastal resources, including stream ecology, and to ensure that the proposed diversion does not become the permanent response to elevated water contamination levels at the beach.

In addition, the proposed project involves the temporary diversion of polluted creek water offshore. Re-location of polluted water, rather than clean-up and/or treatment of the polluted water is not the preferred mid or long term solution to addressing water quality problems at Aliso Beach. Continued re-location of polluted water from the surfzone to the offshore environment could have

cumulative or long term impacts upon water quality and biological resources. In addition, if the Aliso Creek Watershed is not cleaned up and development within the watershed continues, pollution levels in the waters of Aliso Creek could intensify. Increases in the concentration of pollutants in the creek waters could change the effectiveness of the diversion and/or change offshore impacts. Therefore, the Commission requires that certain monitoring (some of which already occurs under other regulatory programs) occur as a condition of this approval. Accordingly, Special Condition 3 of Coastal Development Permit Amendments 5-97-316-A4, A-5-LGB-97-166-A4, and 5-83-959-A8 require the applicant to provide to the Commission monitoring data and analysis (which may also be required by the San Diego Regional Water Quality Control Board and the California Health & Safety Code (i.e. AB411)) for the project period and for comparative periods when the project was not in place (e.g. 3 months before project implementation and 3 months after project implementation) for (1) the quantities and types of pollutants (both organic and heavy metals) being discharged from the outfall, (2) the quantities and types of pollutants (both organic and heavy metals) present in the waters of Aliso Creek, the surf zone and vicinity where Aliso Creek discharges to coastal waters, and in near shore waters, and (3) the effects of the project on the marine environment in the vicinity of the outfall and Aliso Creek County Beach, including beneficial/adverse effects on human health and marine life. The Commission is also requiring the applicant to submit copies of monitoring, analysis and other regulatory activity related to the outfall and the Aliso Creek Watershed in order that the Commission may understand other regulatory responses which may relate to the impact of the diversion and the future need for the diversion. Finally, Special Condition 3 requires the applicant to submit the results of the monitoring to the Executive Director by March 15, 2002 in order that the data and analysis may be reviewed prior to any request for diversion in 2002. The monitoring results are to be accompanied by an analysis which demonstrates whether applicable water quality standards (e.g. in stream Basin Plan objectives for Aliso Creek and Ocean Plan standards) were met during the project period and when the project was not operational. The analysis must determine if any beach posting or closures occurred during the diversion and whether any reduction in the quantity of postings or closures may be attributable to the diversion. The analysis is to also contain a determination of whether the proposed project had any beneficial/adverse impacts upon human health and marine life including any such impacts at the outfall, in near shore waters, in the surf zone or in Aliso Creek. This condition is similar to , but more specific than, the condition previously imposed by Emergency Coastal Development Permit 5-00-272-G that was issued on July 20, 2000 and under Coastal Development Permit Amendments 5-97-316-A3, A-5-LGB-166-A3 and 5-83-959-A7.

It is possible that monitoring may show that, even with the proposed project, bacteriological pollutants in the ocean water at the creek's mouth and adjoining beach are still above maximum levels for safe human contact. The NPDES permit requires AWMA to ensure that discharges from its outfall do not result in levels of bacteriological pollutants which are unsafe for human contact. As a result, if the monitoring data show that bacteriological pollutants at the creek mouth have not decreased, AWMA will have to determine if the bacteriological pollutants are washing back onshore from its outfall, or if there is a different source. If the cause is bacteriological pollutants from the outfall, then AWMA will have to further determine if the source is from the creek's flows or from one of its sewage treatment plants. If the source of the pollutants causing any violation of water quality standards at the outfall is the creek's flows, then AWMA must discontinue diverting the creek flows into the pipeline and outfall. Section 3.4 "Violations of Regulations" of the agreement between AWMA and the County of Orange allows AWMA to terminate the agreement and halt the diversion if AWMA is in non-compliance with water quality regulations as a result of the proposed project. Therefore, if a water quality problem occurs as a result of the proposed

project, AWMA would have to discontinue the project, eliminating the water quality problem at the outfall, or be in violation of its NPDES permit.

Addendum No. 1 to AWMA's NPDES permit approved by the RWQCB requires AWMA to continue its monitoring program, taking into consideration the additional discharge from the creek (Exhibit 10). The addendum does not raise the allowable limits for pollutants to accommodate the increase discharge from the creek. Therefore, compliance with the RWQCB's NPDES permit for the outfall would ensure that the discharge from the creek would not result in either coliform or non-coliform pollutants from rising to levels above that considered safe for marine life or human contact. Meanwhile, Condition No. 6 of permit A-61-76 contained standards for the effluent discharged from the AWMA outfall. Special Condition 6 was amended by 5-83-959-A5 to require compliance with RWQCB standards as specified in the RWQCB's Order No. 95-107 for the subject outfall, rather than a specific numerical standard which may not be consistent with RWQCB standards. Special Condition 2 of Coastal Development Permit Amendment 5-83-959-A8 re-iterates, but does not change, the Commission's previously imposed requirement that any discharges from the AWMA outfall must not exceed the standards specified in RWQCB's Order No. 95-107. Accordingly, even with the diversion in place, AWMA is required by the RWQCB and Coastal Development Permit A-61-76 (5-83-959) to comply with the standards established in Order No. 95-107. This requirement will assure that coastal waters are not degraded by the proposed project.

As will be noted more fully under "Streambed Alteration and Biological Resources" the proposed project will cause temporary changes to a stream bed and stream bank. In addition, the project would discharge polluted water offshore. Due to the temporary nature of the project, adverse impacts upon biological resources are not anticipated. However, in order to assure that the project does not contribute to any degradation of any creek habitat, Special Condition 3 requires the applicant to restore the creek to its pre-project condition, to eliminate invasive exotic plants in the project area, and re-vegetate for erosion control purposes any upland areas adjacent to the creek disturbed by construction activity. Meanwhile, if the project were to continue, long term cumulative adverse impacts could occur. In order to monitor for such impacts Special Condition 3 of Coastal Development Permit Amendments 5-97-316-A4, A-5-LGB-97-166-A4, and 5-83-959-A8 requires the applicant to monitor and provide data and analysis regarding the effects of the project on riparian vegetation and other biological resources (including, but not limited to, tidewater goby and/or their habitat) along the banks and within Aliso Creek in the area of the creek affected by the proposed berm. Special Condition 3 also requires the applicant to monitor the effects of the project upon biological resources at the outfall. Finally, Special Condition 2 of Coastal Development Permit Amendments 5-97-316-A4 and A-5-LGB-97-166-A4 (which pertain to the berm itself) requires restoration of the creek to pre-project conditions after removal of the berm.

Thus, as conditioned to: 1) limit the proposed project to the summer season of 2001; 2) require submittal of water quality monitoring data and conclusions regarding the data, 3) ensure the diversion does not result in pollution levels at the outfall which exceed State standards, 4) monitoring for biological impacts at the creek and the outfall; and 5) restoration of the creek to pre-project conditions, the Commission finds that the proposed project would maintain the quality of coastal waters appropriate to maintain optimum populations of marine organisms and for the protection of human health. Therefore, as conditioned, the Commission finds that the development proposed under Coastal Development Permit Amendment 5-97-316-A4 and 5-83-959-A8 would be consistent with Sections 30230 and 30231 of the Coastal Act. In addition, as conditioned, the Commission finds that the development proposed under Coastal Development Permit Amendment A-5-LGB-166-A4 and 5-83-959-A8 would be consistent with LCP Policy 4-H.

C. STREAMBED ALTERATION AND BIOLOGICAL RESOURCES

Section 30236 of the Coastal Act states:

> *Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.*

Certified Laguna Beach Local Coastal Program ("LCP") Policy 1-J states (standard of review for A-5-LGB-166-A4 and upland portions of 5-83-959-A8):

> *In order to maintain stable channel sections and the present level of beach sand replenishment, sediment movement in natural drainage channels shall not be significantly changed.*

Certified Laguna Beach Local Coastal Program ("LCP") Policy 4-A states (standard of review for A-5-LGB-166-A4 and upland portions of 5-83-959-A8):

> *Protect fresh water lakes, streams, waterways and riparian habitats, and preserve the borders and banks of lakes and streams in there natural state, where possible.*

Certified Laguna Beach LCP Policy 9-B states (standard of review for A-5-LGB-166-A4 and upland portions of 5-83-959-A8):

> *Prohibit filling and substantial alteration of streams and/or diversion or culverting of such streams except as necessary to protect existing structures in the proven interest of public safety, where no other methods for protection of existing structures in the floodplain are feasible or where the primary function is to improve fish and wildlife habitat. This provision does not apply to channelized sections of streams without significant habitat value.*

Certified Laguna Beach Local Coastal Program ("LCP") Policy 9-U states (standard of review for A-5-LGB-166-A4 and upland portions of 5-83-959-A8):

> *Restore and retain Aliso Creek in a natural state and protect the Creek from infringement of new development.*

The upper reaches of the Aliso Creek watershed are relatively undisturbed and contain a variety of native vegetation typical of a riparian environment. However, the lower reaches of Aliso Creek, where the proposed project is located, has been degraded by erosion and attendant attempts to stabilize the creek bank with hard structures. The creek in the project area has also been extensively invaded by non-native plant species. In addition, according to a study titled Aliso Creek Water Quality Planning Study dated June 2000, habitat degradation and very large flood events in the early 1980's eliminated all remaining large fish from the creek. Aquatic wildlife is present within the creek waters, however, degradation of creek morphology, high water

temperatures, bacteriological contamination, and/or aquatic toxicity affect the persistence and potential reintroduction of desirable aquatic species.

While the lower reach of Aliso Creek is degraded, it was recently designated as Critical Habitat for the federally endangered tidewater goby (Eucyclogobius newberryi). This designation became effective on December 20, 2000. The tidewater goby is a small fish which is found in coastal streams and associated wetlands, flood plains and estuaries along the northern and southern California coastline. The Critical Habitat Designation applies to 10 coastal stream segments in Orange and San Diego counties. At Aliso Creek, the designation applies to approximately 0.6 miles of the portion of the creek upstream of the Pacific Ocean. The proposed berm is located within the designated area.

However, according to the published critical habitat designation (Federal Register, Vol. 65, No. 224) Aliso Creek is not presently occupied by tidewater goby. Aliso Creek was historically occupied, however, the species is not present there now. The purpose of designating Aliso Creek as critical habitat is to reserve the area for future re-introduction of the species to the creek (Federal Register, Vol. 65, No. 224, Monday, November 20, 2000 p. 69699).

The applicant has consulted with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service regarding the impacts the proposed project may have upon tidewater goby and the future potential for tidewater goby to be re-introduced to Aliso Creek. In a letter dated May 9, 2001, the USFWS states "…that the impacts will be temporary in nature provided that the project site is restored to its pre-project contours and conditions immediately following the berm's removal at the end of each beach season." Furthermore, the letter states "…we have no immediate plans or funding for a recovery action that includes translocation of goby into Aliso Creek." The USFWS reserved the right to reconsider the determination if additional information revealed that impacts to goby may occur. In addition, the USFWS only concurred with the project if it were to occur for a period of 1 to 3 years (Exhibit 10). Also, the USACE has conditioned their approval for a single year extension rather than a multiple year extension (Exhibit 9).

The construction of the sand berm in Aliso Creek will result in the alteration of the creek bed. Ponding of water upstream of the proposed berm would flood riparian vegetation upstream from the berm. Riparian vegetation seaward of the proposed berm would be deprived of water and may die. However, because the proposed construction would be temporary (i.e., not more than six months in duration) and last for the 2001 summer season only, it is not substantial alteration. The proposed project is not a permanent solution for managing pollutants in Aliso Creek. Prior information that was discussed in this report show that the proposed project has been effective, but this diversion project will only be temporary until an overall watershed management plan for reducing pollutants in Aliso Creek can be formulated. Furthermore, the one season limitation ensures the proposed project will not become a permanent channelization.

In addition, the proposed project would occur during the dry summer season, when there is not much water in Aliso Creek and therefore the amount of riparian vegetation which grows would likely be less than during the rainy season. Thus, the amount of riparian vegetation which would be temporarily impacted would be less than during the rainy season. The riparian vegetation located in the proposed project area consists of non-native invasive species. The predominant vegetation consists of iceplant (*Carpobrotus* spp.) and giant reed (*Arundo donax*). Further, the applicant has received a streambed alteration agreement from the California Department of Fish and Game approving the proposed project (Exhibit 11). Under the Streambed Alteration

Agreement, the Department of Fish and Game required that eradication of giant reed (Arundo donax) take place at Whiting Ranch Wilderness Park as a mitigation measure. Whiting Ranch Wilderness Park is within a mile of the headwaters of Aliso Creek and is the first stand of giant reed in the upper watershed. The Department of Fish and Game determined that to eradicate giant reed, it is best to begin eradication at the top of the watershed so to prevent the lower distribution of giant reed. The Department of Fish and Game did not impose eradication of giant reed and revegetation of the project site with native vegetation, but this eradication at the top of the watershed would be beneficial to the stream ecosystem as it would remove an invasive non-native plant. The Department of Fish and Game believes that eradicating it at the top of the watershed would reduce the ability of the giant reed from progressing down the watershed. With continued eradication, the watershed, as well as the project area, would eventually be free of giant reed.

Still, the Commission finds that it is necessary to require that the proposed berm be removed after one summer season, as proposed by the applicant, and further that the bed of Aliso Creek be restored to its natural state, as it previously existed prior to construction of the berm. Removal of the berm would re-establish surface area for riparian vegetation. In addition, the Commission requires the applicant to remove non-native invasive plants species from the project area. Removal of exotic invasive plants and restoration would return riparian vegetation to the creek corridor, which was eliminated or otherwise affected by the proposed project, to its previously existing condition or better. The special condition describes both the banks and bed of Aliso Creek, even though the banks are within the certified area of the City, because of the physically integrated nature of the proposed berm. In addition, the Commission is requiring monitoring and documentation of any biological impacts in order to identify whether recurring implementation of the diversion would have any adverse impact upon biological resources.

The project, as proposed and conditioned, is temporary and would be limited to the summer 2001 season. Due to the temporary nature of the project it is not considered substantial alteration of a stream and is thus consistent with Section 30236 of the Coastal Act and Policy 9-B of the Laguna Beach certified Local Coastal Program. In addition, since the berm is temporary and will be removed it will not significantly change sediment movement in the creek. Therefore, the project as proposed and conditioned is consistent with Policy 1-J of the Laguna Beach certified Local Coastal Program. In addition, as conditioned, the project will result in removal of exotic invasive vegetation from the creek and restore the habitat within the creek. Therefore, the Commission finds the project, as conditioned, to be consistent with Policy 4-A and 9-U of the Laguna Beach certified Local Coastal Program.

D. PUBLIC ACCESS AND RECREATION

Section 30604(c) of the Coastal Act states:

> *Every coastal development permit issued for any development between the nearest public roadway and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200) [of the Coastal Act].*

Policy 3-A of the Open Space and Conservation policies of the Laguna Beach certified local coastal program states:

Retain and improve existing public beach accessways in the City, and protect and enhance the public rights to use dry sand beaches of the City.

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Construction of the proposed project will require the staging and storage of equipment and materials in the public parking lot adjacent to the creek. This public parking lot provides parking for Aliso Beach. Access to the beach from the parking lot is available via a tunnel which passes under Pacific Coast Highway. Public access to the beach may be interrupted if construction of the proposed project interferes with the public's ability to access and park in the parking lot, especially during peak summer use of the beaches, generally between Memorial Day and Labor Day each year. Accordingly, Special Condition 5 of this amendment requires the that construction of the proposed project not interfere with the public's ability to access and park in the public parking lot during the period of Memorial Day to Labor Day. Therefore, as conditioned, the Commission finds the proposed development conforms with the public access requirements of the certified local coastal program.

In addition, the proposed project would temporarily resolve the problem of ponding polluted water at Aliso Creek County Beach, a popular beach. This would encourage greater use of the beach.

In addition, the proposed project does not involve any alteration to the existing Aliso Water Management Agency Ocean Outfall. Rather, an existing subsurface pipe (constructed under the underlying permits which are now being amended) is being used to transport the creek water to the outfall line. Use of the existing pipe avoids any need to trench in the public parking lot. Accordingly, other than the construction outlined above, the proposed development does not result in any change to existing access. Therefore, the Commission finds that the proposed project is consistent with policy 3-A of the certified local coastal program and Section 30210 of the Coastal Act.

E. FLOOD HAZARDS

Section 30253 of the Coastal Act states, in relevant part:

New development shall:

(l) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

The construction of a berm within Aliso Creek would result in ponding of water upstream of the proposed berm. Excessive ponding could result in the creek overflowing its banks which could flood development inland of the berm. However, the proposed berm is designed to minimize the threat of flooding by incorporating a spillway which allows water to flow over the berm into the creek seaward of the berm if water elevations become too high. In fact, in a letter dated March 21, 2001, the applicant indicates that no flooding of any kind occurred when the berm was in place in

1999 and 2000. In addition, the Commission is requiring that the proposed berm be removed by October 15, 2001, which is the normal start of the rainy season. Therefore, the berm would not be in place when rainfall is typically heaviest.

However, an abnormal summer storm could cause water to rise much more quickly than can be pumped to the sewage outfall or released by the spillway, flooding properties located inland of the proposed berm. Therefore, should the National Weather Service forecast a strong storm (i.e., one inch or more of rainfall during a 24 hour period) prior to October 15, 2001, the Commission finds it necessary to require the applicant to remove the proposed berm before the forecasted start of the storm to prevent flooding of properties inland of the proposed berm. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30253 of the Coastal Act.

F. GROWTH INDUCEMENT/AIR QUALITY

Section 30254 of the Coastal Act states:

> *New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route l in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.*

City of Laguna Beach LCP Policy 2-Q states:

> *New development shall be compatible or phased with the carrying capacity of the transportation network, public works systems and other municipal services.*

City of Laguna Beach LCP Policy 14-A states:

> *Monitor activities of adjacent jurisdiction [sic] regarding population growth and identify their impacts on City services and environmental quality.*

When the Commission approved the AWMA outfall under Coastal Development Permit A-61-76 (a.k.a. 5-83-959) a primary concern was its potential to induce growth. The outfall, as proposed, would have allowed a five-fold increase in population, raising issues with public access and air quality. In order to address this issue, effluent flows were restricted as a way of limiting growth. Since approval of the outfall in 1976, the Commission has granted amendments to the permit which have increased effluent flows to accommodate development that it determined would be adequately mitigated.

Original concerns with the approved outfall included whether the outfall would induce growth, and whether that growth would have adverse air quality impacts. The proposed amendment involves diversion of existing flows of Aliso Creek into the outfall. No increase in the capacity of the outfall

is proposed. Therefore, the proposed amendment would not induce growth nor result in development which would have adverse air quality impacts. In addition, the outfall currently operates well below capacity. The proposed project, which is temporary, would not be a burden on the capacity of the outfall. Therefore, the Commission finds that the proposed amendment would be consistent with Section 30254 of the Coastal Act and Policy 2-Q and 14-A of the Laguna Beach certified LCP.

G. LOCAL COASTAL PROGRAM

Section 30604 of the Coastal Act states, in relevant part:

> *(b) After certification of the local coastal program, a coastal development permit shall be issued if the issuing agency or the commission on appeal finds that the proposed development is in conformity with the certified local coastal program.*

The City of Laguna Beach local coastal program was effectively certified on January 13, 1993. The portions of the proposed project within the certified areas of the City of Laguna Beach have been conditioned to be consistent with the provisions of the certified local coastal program.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the water quality, streambed alteration, and hazards policies of Chapter Three of the Coastal Act and policies of the certified Local Coastal Program. Mitigation measures: 1) limit the proposed project to one summer season and limit the quantity of the diversion, 2) require restoration of the stream after the development is removed, 3) require submittal of water quality, biological and flood hazard monitoring data and conclusions regarding the data, 4) require removal of the berm before October 15, 2001 in the event of significant storm event; 5) require avoidance of adverse impacts upon the public's ability to use parking spaces adjacent to the project site and 6) require that the water diverted through the outfall conform with State water quality standards. These measures will minimize all significant adverse impacts.

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

Glossary of Selected Acronyms

AWMA = Aliso Water Management Agency
CDP = coastal development permit
LCP = local coastal program
NPDES = National Pollution Discharge Elimination System
RWQCB = California Regional Water Quality Control Board - San Diego Region

Appendix A
Substantive File Documents

Coastal Commission Substantial Issue Report dated June 20, 1997 for Appeal No: A-5-LGB-97-166; Coastal development permit A-5-LGB-97-166 and amendments, City of Laguna Beach Certified Local Coastal Program; Emergency Permit 5-97-219-G, Emergency Permit 5-00-272-G; Coastal development permit 5-97-316 and amendments; Coastal Development Permit A-61-76/5-83-959 and amendments; Federal Register, Vol. 65, No. 224, Monday, November 20, 2000; 8) Cleanup Abatement Order No. 99-211 issued by the San Diego Regional Water Quality Quality Control Board, 9) City of Laguna Beach coastal development permit CDP97-19; U.S. Army Corps of Engineers Permit 96-00072-LTM; California Department of Fish and Game *Agreement Regarding Proposed Stream or Lake Alteration* dated March 11, 1996; California Regional Water Quality Control Board *Monitoring and Reporting Program* No. 95-107 for NPDES No. CA0107611; California Regional Water Quality Control Board, San Diego Region, Order No. 95-107, NPDES No. CA0107611; Addendum No. 1 to Order No. 95-107, NPDES No. CA0107611 titled *Waste Discharge Requirements for the Aliso Water Management Agency, Orange County, Discharge to the Pacific Ocean through the Aliso Water Management Agency Ocean Outfall*; *Agreement between Aliso Water Management Agency on Behalf of Project Committee No. 24 and the County of Orange (EMA) for County's Use of AWMA Ocean Outfall and Other AWMA Facilities for County's Aliso Creek Diversion Project;* Regional Water Quality Control Board San Diego Region 13225 Directive dated March 2, 2001.